

We claim:

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1. A method for the inhibition of post-operative
adhesion formation in a body between tissue surfaces in
a body cavity having been subjected to a surgical
procedure comprising administering Tranilast, or an
10 analog thereof, directly to said tissue surfaces in said
body cavity in amounts and under conditions effective to
inhibit formation of adhesions thereon.

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2. The method of claim 1 wherein said Tranilast or
analog thereof is administered in cooperation with a
delivery vehicle suitable for use in the local, non-
systemic administration of a therapeutic agent to the
body.

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3. The method of claim 2 wherein said delivery vehicle
is selected from the group consisting of microcapsules,
microspheres, barriers, liposomes, lipid foams,
solutions, compositions, osmotic pumps, fibers,
filaments, gels, foams and films.

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4. The method of claim 3 wherein said barrier is
absorbable.

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5. The method of claim 1 wherein said Tranilast is administered in combination with a therapeutic agent, said therapeutic agent administered in an amount effective to provide the therapeutic effect intended by administration of said therapeutic agent.

6. The method of claim 5 wherein said therapeutic agent is selected from the group consisting of an anti-platelet, an anti-fibrotic, an anti-inflammatory, an anti-proliferative and an agent that inhibits collagen synthesis.

7. The method of claim 1 wherein said Tranilast analog is selected from the group consisting of N-(2-Acetyl-4,5-dimethoxyphenyl) (4-((phenylamino)carbonylamino)phenyl)formamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-2-(4-((phenylamino)carbonylamino)phenyl)ethanamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-((phenylamino)carbonylamino)phenyl)prop-2-enamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-((phenylamino)carbonylamino)phenyl)propanamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-4-(4-((phenylamino)carbonylamino)phenyl)butanamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-(phenylcarbonylamino)carbonylamino)phenyl)propanamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-(2-

phenylacetyl amino) phenyl) propanamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-

(phenoxy carbonyl amino) phenyl) propanamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-((2-

5 nitrophenyl) amino) carbonyl amino) phenyl) propanamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-((3-

nitrophenyl) amino) carbonyl amino) phenyl) propanamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-((4-

10 nitrophenyl) amino) carbonyl amino) phenyl) propanamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-((2-

aminophenyl) amino) carbonyl amino) phenyl) propanamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-((3-

aminophenyl) amino) carbonyl amino) phenyl) propanamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-((4-

15 aminophenyl) amino) carbonyl amino) phenyl) propanamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-((4-

fluorophenyl) amino) carbonyl amino) phenyl) propanamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-((4-

20 acetylphenyl) amino) carbonyl amino) phenyl) propanamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-((4-

methylphenyl) amino) carbonyl amino) phenyl) propanamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-((4-

methoxyphenyl) amino) carbonyl amino) phenyl) propanamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-((3,4,5-

25 trimethoxyphenyl) amino) carbonyl amino) phenyl) propanamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-((4-

pyridyl) amino) carbonyl amino) phenyl) propanamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-

((benzylamino) carbonylamino)phenyl)propanamide, N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-((butyl amino) carbonylamino)phenyl)propanamide and N-(2-Acetyl-4,5-dimethoxyphenyl)-3-(4-
5 ((cyclohexylamino) carbonylamino)phenyl)propanamide.

8. The method of claim 1 wherein said Tranilast or analog thereof is administered in a single dose.

10 9. The method of claim 1 wherein said Tranilast or analog thereof is administered by sustained release.

15 10. The method of claim 1 wherein said Tranilast or analog thereof is administered by burst/sustained release.

20 11. The method of claim 1 wherein said Tranilast or analog thereof is administered at a level of from about 0.01 milligram per kilogram of the body to about 3,000 milligram per kilogram of the body.

25 12. The method of claim 1 further comprising administering Tranilast systemically to said body prior to said surgical procedure.

13. The method of claim 1 wherein Tranilast is administered systemically to said body prior to said surgical procedure in amounts and for a time effective

to increase inhibition for formation of adhesions in said body when compared to administration of Tranilast directly to said tissue surfaces in said body cavity in said body without said systemic administration.

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14. A delivery vehicle suitable for local, non-systemic administration of a drug to a body and directly to tissue within a body cavity having been subjected to a surgical procedure, said vehicle comprising Tranilast or
10 an analog thereof in an amount effective to inhibit formation of post-operative adhesions upon local, non-systemic administration of said Tranilast to said tissue.

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15. The delivery vehicle of claim 14 selected from the group consisting of microcapsules, microspheres, barriers, liposomes, lipid foams, solutions, compositions, osmotic pumps, fibers, filaments, gels, foams and films.

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16. The delivery vehicle of claim 15 comprising a polymer selected from the group consisting of poloxamers, poly(orthoester)s, poly(vinyl alcohol)s, poly(anhydride)s, poly(methacrylate)s,
25 poly(methacrylamide)s, anionic carbohydrate polymers, poly(hydroxybutyric acid)s, polyacetals, poly(l-lactide), poly(dl-lactide), poly(dl-lactide-co-glycolide)s, poly(l-lactide-co-glycolide)s, poly(e-

caprolactone), polyglycolide, poly(p-dioxanone)s, poly(trimethylene carbonate), poly(alkylene diglycolate)s, poly(oxaester)s, poly(oxaamide)s and glyceride polymers.

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17. The delivery vehicle of claim 15 wherein said liposome is selected from the group consisting of L-alpha-distearoyl phosphatidylcholine, phosphatidylcholine, dipalmitoylphosphatidylcholine and egg phosphatidylcholine.

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18. The delivery vehicle of claim 15 wherein said solution comprises a crystalloid instillate selected from the group consisting of phosphate buffered saline, saline and lactated Ringer's solution.

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19. The delivery vehicle of claim 15 wherein said solution comprises viscous instillate comprising a carrier selected from the group consisting of dextrans, cyclodextrans, hydrogels, carboxymethylcellulose, poly(saccharide)s, hyaluronic acids, crosslinked hyaluronic acids and chondroitin sulfates.

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20. The delivery vehicle of claim 15 wherein said barrier is absorbable.

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21. The delivery vehicle of claim 19 wherein said absorbable barrier is selected from the group consisting

of hyaluronic acids, cellulosics derivatives, collagens,
polyethylene glycols, pluronics, chitin, chitosans,
dextrans, glucoses, carbohydrates, gelatins,
glycosaminoglycans, polyacrylamides, polyvinyl
5 pyrrolidones, polyvinyl alcohols, polymethacrylics,
alginates, starches and polypeptides.

22. The delivery vehicle of claim 14 further comprising
a therapeutic agent in an amount effective to provide
10 the therapeutic effect intended by administration of
said therapeutic agent.

23. The delivery vehicle of claim 22 wherein said
therapeutic agent is selected from the group consisting
15 of an anti-platelet, an anti-fibrotic, an anti-
inflammatory, an anti-proliferative and an agent that
inhibits collagen synthesis.

24. The delivery vehicle of claim 14 wherein said
20 vehicle provides for single dose administration of said
Tranilast or analog thereof.

25. The delivery vehicle of claim 14 wherein said
vehicle provides for sustained release of said Tranilast
25 or analog thereof.

26. The method of claim 14 wherein said vehicle provides for burst/sustained release of said Tranilast or analog thereof.

5 27. The delivery vehicle of claim 14 comprising from about 0.01 milligram Tranilast or analog thereof per kilogram of the body to about 3,000 milligram Tranilast or analog thereof per kilogram of the body.

10 28. A composition suitable for local, non-systemic administration of a drug to a body and directly to tissue within a body cavity having been subjected to a surgical procedure, said composition comprising
15 Tranilast or an analog thereof in an amount effective to inhibit formation of post-operative adhesions upon local, non-systemic administration of said composition to said tissue, and a carrier suitable for local, non-systemic administration of said Tranilast or analog thereof.

20 29. The composition of claim 27 wherein said carrier is selected from the group consisting of microcapsules, microspheres, barriers, liposomes, lipid foams, solutions, osmotic pumps, fibers, filaments, gels, foams
25 and films.

30. The composition of claim 29 wherein said carrier comprises a polymer selected from the group consisting

of poloxamers, poly(orthoester)s, poly(vinyl alcohol)s,
poly(anhydride)s, poly(methacrylate)s,
poly(methacrylamide)s, anionic carbohydrate polymers,
poly(hydroxybutyric acid)s, polyacetals, poly(l-
5 lactide), poly(dl-lactide), poly(dl-lactide-co-
glycolide)s, poly(l-lactide-co-glycolide)s, poly(e-
caprolactone), polyglycolide, poly(p-dioxanone)s,
poly(trimethylene carbonate), poly(alkylene
diglycolate)s, poly(oxaester)s, poly(oxaamide)s and
10 glyceride polymers.

31. The composition of claim 28 wherein said
composition provides for single dose administration of
said Tranilast or analog thereof.

15 32. The composition of claim 28 wherein said
composition provides for sustained release of said
Tranilast or analog thereof.

20 33. The composition of claim 28 wherein said
composition provides for burst/sustained release of said
Tranilast or analog thereof.

25 34. The composition of claim 28 comprising from about
0.01 milligram Tranilast or analog thereof per kilogram
of the body to about 3,000 milligram Tranilast or analog
thereof per kilogram of the body.

35. The delivery vehicle of claim 29 wherein said liposome is selected from the group consisting of L-alpha-distearoyl phosphatidylcholine, phosphatidylcholine, dipalmitoylphosphatidylcholine and
5 and egg phosphatidylcholine.

36. The delivery vehicle of claim 29 wherein said solution comprises a crystalloid instillate selected from the group consisting of phosphate buffered saline,
10 saline and lactated Ringer's solution.

37. The delivery vehicle of claim 29 wherein said solution comprises viscous instillate comprising a carrier selected from the group consisting of dextrans,
15 cyclodextrans, hydrogels, carboxymethylcellulose, poly(saccharide)s, hyaluronic acids, crosslinked hyaluronic acids and chondroitin sulfates.

38. The delivery vehicle of claim 29 wherein said
20 barrier is absorbable.

39. The delivery vehicle of claim 38 wherein said absorbable barrier is selected from the group consisting of hyaluronic acids, cellulosics derivatives, collagens,
25 polyethylene glycols, pluronics, chitin, chitosans, dextrans, glucoses, carbohydrates, gelatins, glycosaminoglycans, polyacrylamides, polyvinyl

pyrrolidones, polyvinyl alcohols, polymethacrylics, aliginates, starches and polypeptides.

5 40. The delivery vehicle of claim 28 further comprising a therapeutic agent in an amount effective to provide the therapeutic effect intended by administration of said therapeutic agent.

10 41. The delivery vehicle of claim 39 wherein said therapeutic agent is selected from the group consisting of an anti-platelet, an anti-fibrotic, an anti-inflammatory, an anti-proliferative and an agent that inhibits collagen synthesis.

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